1.01 ULTRA-VIOLET LIGHTING

A. General

1. The fixture shall be an ultraviolet LED wash fixture with individually focusable emitters. The fixture shall be the SS-UV-40 from Altman Lighting Inc., or approved equal.

2. The fixture shall utilize a high efficiency lenses, specified at time of order, to determine beam angle.

3. The fixture shall comply with USITT DMX-512 A and ANSI E1.20-2006 Remote Device Management over USITT DMX 512A Standard (RDM) for DMX controlled models.

4. The fixture shall be cETLus listed and CE marked.

5. Fixtures which do not comply with this specification shall not be accepted.

B. Physical

1. The fixture shall be constructed of extruded aluminum and steel.

2. The fixture shall use 4 separate, individually placed LED emitter tubes for directional focusing.

3. The emitter tubes shall be powered and controlled from a central controller box via power and data extension cables to each tube in a daisy-chain configuration.

4. Central controller box shall feature DMX in and passthrough.

5. Color shall be black with anodized and epoxy paint.

6. Power supply and electronics shall be integral to each unit.

7. Mounting via adjustable yoke and pipe clamp.

6. LED substrates shall be coupled to a highly efficient and silent heat sink cooling system.

C. Thermal

1. The luminaire shall be cooled via natural convention with no aide of fans or other cooling systems.

2. Under normal operating conditions, the LED engine shall be capable of 50,000 hours rated lifespan to LM-70 / 70% maximum calibrated intensity with convective cooling.

3. Ambient operating temperature shall be 32°F to 104°F (0 – 40 °C) non-condensing.

D. Control and User Interface

1. A local control keypad with an LCD display shall be provided for configuration and control of:
   a. DMX-512A Device Address
   b. Fixture Personality
   c. Stand Alone (Manual) Operation

2. It shall be possible to lock out the control keypad at the fixture to prevent accidental change in fixture configuration during operation. Locking and unlocking the control keypad shall be via predefined key sequence.

3. Each fixture shall be compatible with the USITT DMX512-A control protocol and ANSI E1.20-2006 Remote Device Management over DMX512-A (RDM) standard.

4. The DMX-512A device address for each fixture shall be user selectable.

5. It shall be possible to set the DMX-512A device address for the fixture while the fixture is installed and connected to the system via the RDM (ANSI E1.20-2006 protocol) and an appropriate device such as a PC or a handheld programmer.

6. Fixtures which do not allow for setting of the DMX address via both local controls at the fixture and remotely while installed via RDM shall not be accepted.

7. The fixture shall have user selected personalities to correctly match response to the application and control system utilized. Personalities shall provide the following options which may be combined as desired:
   a. 8 or 16 Bit DMX operation
   b. Stand-alone effects

c. Stand-alone fixed output

8. The fixture shall be capable of standalone operation, activated and configured at the control keypad. Standalone modes shall include the following:
   a. Fixed Intensity
   b. Primary and Replica

E. Optical

1. Fixture shall feature high-performance long-life UV-A 365nm LED emitters.

2. Two (2) different lens assemblies shall be available in variations of:
   a. 10 degree
   b. 30 degree

A. Power

1. On-board multi-voltage power supply. Range 120-240VAC 50/60Hz.

B. Dimming Engine

1. Luminaire shall provide full range dimming performance based upon its DMX input control signal and configuration and shall be equipped with an LED system compatible with standard 8-bit and 16-bit input, with high resolution dimming.

2. Dimming curves shall be optimized for smooth dimming at low intensities and over longer timed fades.

3. LEDs shall be driven by Pulse Width Modulation. (PWM)

4. Additional smoothing algorithms shall be available to augment the high-resolution dimming engine

END SPECIFICATION